

MICROCOPY RESOLUTION TEST CHART

URFAU CONTANDARDS 1963 A

After the Covering Force Fight, Then What?:

The Armored Cavalry Regiment in the Corps Defensive Rear Battle

by Major Michael D. Heredia Cavalry DTIC ELECTE APR 2 0 1988

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

9 March 1988

Approved for public release; distribution is unlimited.

# UNCLASSIFIED

A192583

SECURITY CLASSIFICATION OF THIS PAGE						
REPO	N PAGE	Form Approved OMB No. 0704-0188				
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS				
2a. SECURITY CLASSIFICATION AUTHORITY	2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release, distribution			
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE		is unlimited.				
4. PERFORMING ORGANIZATION REPORT NUMBER(\$)		5. MONITORING ORGANIZATION REPORT NUMBER(S)				
6a. NAME OF PERFORMING ORGANIZATION School of Advanced Military Studies, USACGSC		73. NAME OF MONITORING ORGANIZATION				
6c ADDRESS (City, State, and ZIP Code) Fort Leavenworth, Kansas 66027-0700		7b. ADDRESS (City, State, and ZIP Code)				
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER				
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF F	UNDING NUMBERS			
		PROGRAM ELEMENT NO.		TASK WORK UNIT NO. ACCESSION NO.		
11. TITLE (Include Security Classification) After the Covering Force Fight, Then What?: The Armored Cavalry Regiment in the Corps: Defensive Rear Battle. (Unclassified)						
12. PERSONAL AUTHOR(S) Michael	D. Heredia, MAJ US	Army				
I Management	ME COVERED	14. DATE OF REPO		15. PAGE COUNT		
16. SUPPLEMENTARY NOTATION						
17. COSATI CODES	18. SUBJECT TERMS (	Continue on reverse	e if necessary and i	dentify by block number)		
FIELD GROUP SUB-GROU	Gavalry, iter	riment. Rear	Area Combat	Operations		
		Elimone, mear area compan obergorous				
After the Covering Force Fight, Then what?: The Role of the Armored Cavalry Regment in the Corps Defensive Mear Battle by MAJ Michael D. Heredia, US Army, 64 pages.  This monograph examines whether or not the Armored Cavalry Regiment (ACR) has a useful role to perform in the Corps defensive rear battle. Its genesis lies with the appreciation that the Soviets have tremendous capabilities for deep attack but that US doctrine does not seem to have a workable counter to this threat. The ACR seems whill suited to deal with the rear battle problem, but is given no doctrinal mandate to do so.  The paper first looks at Soviet deep attack doctrine and capabilities in order to place the threat in perspective. It then reviews US doctrine in light of the threat to determine its adequacy. Then, three historical a gnettes are presented to see if a force similar to an ACR has shown utility in fighting the rear battle in the past. Finally, a critical analysis of US rear battle doctrine is undertaken in order to illustrate how an ACR can be employed to correct the shortcomings noted. (continued)  20. DISTRIBUTION/AVAILABILITY OF ABSTRACT  UNCLASSIFIED/UNLIMITED  DISCUSERS  21. ABME OF RESPONSIBLE INDIVIDUAL  Regment  The Role of the Armored Cavalry Regment  (ACR) has a useful  The Role of Responsible INDIVIDUAL  (ACR) has a useful  Regment  (ACR						
Heredia, Michael D.		(913)	1 - 3 37	ATZL- SW		

DD Form 1473, JUN 86

Previous editions are obsolete.

SECURITY CLASSIFICATION OF THIS PAGE

# Block 19 Continued

Various considerations in deciding when to employ the cavalry, as well as the costs and benefits of doing so are discussed, however, the monograph concludes that there is a definite place for the cavalry in the rear battle. The mission of the dedicated, tactical combat force should be doctrinally recognized for the Armored Cavalry Regiment as its organization, equipment, training and operating methods ideally suit it for the task.

After the Covering Force Fight, Then What?:

The Armored Cavalry Regiment in the Corps Defensive Rear Battle

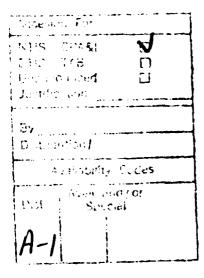
by Major Michael D. Heredia Cavalry

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

9 March 1988

Approved for public release; distribution is unlimited.

**ENGRAPHICATION OF THE PROPERTY OF THE PROPERT** 





# School of Advanced Military Studies Monograph Approval

Name of Student: Major Michael D. Heredia

Title of Monograph: After the Covering Force Fight. Then What?:

The Armored Cavalry Regiment in the Corps

Defensive Rear Battle

Approved by:	
(LTC Gar, N. Stewart, NS)	_ Seminar Leader
(COL L.D. Holder, MA)	Director, School of Advanced Military Studies
Philip J. Brookes	Director, Graduate Degree
( Philip J. Brookes, Ph.D.) Pro	ograms

Accepted this 21st day of March 1988.

#### Abstract

After the Covering Force Fight, Then What?: The Role of the Armored Cavalry Regiment in the Corps Defensive Rear Battle by MAJ Michael D. Heredia, USA, 60 pages.

This monograph examines whether or not the Armored Cavalry Regiment (ACR) has a useful role to perform in the Corps defensive rear battle. Its genesis lies with the appreciation that the Soviets have tremendous capabilities for deep attack but that US doctrine does not seem to have a workable counter to this threat. The ACR seems well suited to deal with the rear battle problem, but is given no doctrinal mandate to do so.

The paper first looks at Soviet deep attack doctrine and capabilities in order to place the threat in perspective. It then reviews US doctrine in light of the threat to determine its adequacy. Then, three historical vignettes are presented to see if a force similar to an ACR has shown utility in fighting the rear battle in the past. Finally, a critical analysis of US rear battle doctrine is undertaken in order to illustrate how an ACR can be employed to correct the shortcomings noted.

Various considerations in deciding when to employ the cavalry, as well as the costs and benefits of doing so are discussed, however, the monograph concludes that there is a definite place for the cavalry in the rear battle. The mission of the dedicated, tactical combat force should be doctrinally recognized for the Armored Cavalry Regiment as its organization, equipment, training and operating methods ideally suit it for the task.

# Table of Contents

			Page		
I.	Intr	roduction	1		
II.	Soviet Doctrine and Capabilities				
III.	I. Current US Rear Battle Doctrine				
IV.	. Historical Inquiry				
٧.	Analysis of US Rear Battle Doctrine and Capabilities				
VI.	I. Conclusions and Recommendations				
	B4				
	Figu				
	1.	Typical US Corps area of operations	40		
	2.	Front wiring diagram	41		
	3.	ACR wiring diagram	42		
	4.	OPN Market Garden- The Front	43		
	5.	The Attack	44		
	6.	The End	45		
	7.	State Farm 79	46		
	8.	Chir River Battles	47		
	9.	The Battle of the Bulge	48		
	10.	The Defense of St. Vith	49		
	11.	Tactical Chain of Command for Rear Battle	50		
	12.	Technical and Combined Chains of Command	51		
<b>1</b> 0			ΕO		
End	notes		52		
Bib	liogr	aphy	58		

#### I. Introduction

The Armored Cavalry Regiment (ACR) provides the Corps Commander with a versatile and potent weapon with which to influence the battlefield. A look at the current doctrinal employment for the cavalry provides clear guidance on fighting the close battle and some interesting possibilities for waging the deep battle. However, there exists no explicit guidance on the role of the Armored Cavalry Regiment in the rear battle.

What is the proper doctrinal role for the ACR in the Corps defensive rear battle? This paper is an attempt to answer that question and address what I believe is a dangerous oversight in our doctrinal literature. This gap in our doctrine encourages the misuse of the ACR and contributes to the failure to employ scarce combat power effectively. Before we begin to pursue the question, we need to understand current doctrine and the dynamics of the modern battlefield.

Modern, high intensity warfare will likely be a chaotic and highly lethal affair characterized by intense combat throughout the depth of the battlefield. Extremely fluid conditions will assure the intermingling of opposing forces and will dictate the non-linear nature of the battlefield.' When these factors are added to the scale of the Corps battlefield (the Corps rear alone can reach 7,500 km2, see figure 1) the command and control challenge becomes imposing.<sup>2</sup>

# Battlefield Framework

To cope with these challenges, AirLand Battle Doctrine (ALB) provides structure to the battlefield. The focus of my discussion will be on the defensive framework established in FM100-5, Operations. This framework is designed to insure that the Corps fights a unified defensive battle comprised of related operations. The elements of the defense are organized into five complementary components:

- 1. Security force operations forward and to the flanks of the defending force
- 2. Defensive operations in the main battle area (MBA)

- 3. Reserve operations in support of the main defensive effort
- 4. Deep operations in the area forward of the forward line of own troops (FLOT)
- 5. Rear operations to retain freedom of action in the rear area

We will look at the fifth element of the defensive framework in greater detail.

The current operational concept of rear operations is to retain freedom of action for fighting close and deep battles.<sup>3</sup> This is a well articulated intent set forth in FM90-14, Rear Battle. The manual goes on to say that while the rear battle represents a critical struggle, fighting it alone can't win the war; it can, however, lose it.<sup>4</sup> Despite this promising start, continued reading of the rear battle doctrine imparts the distinct feeling that there is a doctrinal bias classifying rear battle as less important than close and deep operations.

In order to define the role of the ACR in the rear battle, we must first understand how rear operations fit at the Corps level. This is clearly stated in FN100-15, Corps,:

"The ability to effectively plan and execute its rear operations may well determine whether or not the Corps

has any chance of winning its battle."5

The inability to conduct rear operations could well result in the loss of vital logistics support, synchronization failures when command and control nodes are lost, the impairment or loss of movement routes and, eventually, the disruption of focus on close and deep operations.

Given such penalties for failure, what is needed to seek success in the rear? Clearly, the optimum approach would be to take the offensive yourself. A defense of this sort becomes, as Clausewitz pointed out, "...a shield made up of well-directed blows." Given the political constraints on offensive action, this approach is probably not possible initially. It then appears that the next best solution would be to dedicate a tactical combat force (TCF) to the rear battle to deal with any threat that develops.

Given this choice, the key questions now become: what is the threat to the Corps rear, how do we propose to counter it and is the ACR suitable for this role?

The methodology I will use to address the questions posed is intended to keep the rear battle in proper perspective. This first involves an examination of Soviet deep attack doctrine and current capabilities in order to understand the threat. Once this is clear, we will look at US doctrine to determine if it counters the threat with appropriate concepts and adequate forces. We will next turn to history to see if a force similar to an ACR has shown utility in fighting the rear battle. Finally, I will critically analyze US doctrine in light of the foregoing and draw some conclusions on the role of the ACR in the Corps defensive rear battle.

# II. Soviet Doctrine and Capabilities

#### Background

The Soviet plan to unhinge a defense is firmly grounded in a long history of theoretical study of the deep attack. Classical Western theorists have debated the value of waging war in the enemy's rear. Some, like Jomini, have emphasized the value of decisive or objective points which represent pieces of terrain (often in the enemy's rear) that are important of themselves and deserve protection or possession. The key point here is that the possession of these decisive points could provide a means to reach a strategic objective early and apart from the tactical (close) battle.

Other Western theorists, such as Liddell-Hart, have formed their concept of war around the idea of rear attacks.'O Liddell-Hart in particular sees operations aimed against the enemy's rear as an excellent means of achieving surprise and tempo.'' These concepts have since been eagerly incorporated into Soviet doctrine.

Turning to Soviet thinkers, we find an intense interest in the extension of the attack into the entire depth of the battlefield. The works of V. K. Triandafillov emphasize the need to strike deeply into the enemy's defenses in successive blows. Expanding upon these views is a better known early Soviet theorist, Mikhail Tukhachevskiy. In his book, New Problems in Warfare, he explored ways to increase the depth of an attack by striking with aviation and airborne elements. By these means he sought to achieve not only tempo but operational and strategic depth and objectives. 13

#### Doctrine

Current Soviet deep attack doctrine envisions a wide spectrum of complementary operations. Phase I will consist of the effort to achieve fire superiority using aerial and possibly nuclear and chemical means. Phase II will be an attempt to desynchronize NATO's operational and tactical defense and thereby add momentum to the Soviet offense. Phase III will be the major Frontal operations into NATO's strategic depths in each Theater of Strategic Military Action (TSNA).14

The force structure of the Warsaw Pact armies has been specifically tailored to exploit the concept of deep operations using three broad categories of forces with mutually supporting objectives. These run the gamut from individual agents through unconventional warfare units to standard tactical forces.

Significant supporting forces exist to add weight and momentum to the Soviet ground effort. These include massive numbers of fixed wing ground attack aircraft and attack helicopters. Additionally, both Front and TSMA have large numbers of tactical and intermediate range missiles with nuclear chemical and conventional capabilities which can be expected to support the ground offensive.' There are large numbers of air assault and airborne forces available to the Front commander as well. These include air assault battalions and brigades at Army through Front level as well as airborne divisions at TSMA level.' (See figure 2)

#### Threat Levels

In order to manage the rear battle threats described above, the US Army has established a hierarchy of threat levels. The Level I threat is categorized as individual agent activity through sabotage by sympathizers to the exploitation of existing terrorists groups. Level II threats are those built around planned diversions, assassinations or sabotage by professional, unconventional warfare forces (especially Spetsnaz units) to raids, reconnaissance patrols or ambushes by small conventional combat units operating at great depth. The greatest threat is Level III. This consists of battalion or larger heliborne, airborne, amphibious or ground penetrations into the rear.<sup>17</sup>

Clearly, the most dangerous threat to the Corps is Level III. However, the cumulative impact of Levels I and II can cause major problems to the Corps. The spillover threat to the Corps rear is highlighted by the estimated capability of the Soviets to deploy 720, ten man Spetsnaz teams against AFCENT. Given the Soviet options of employing up to three airborne divisions in the AFCENT area as well, major problems begin to confront the Corps even before ground forces cross the FEBA. Even if a commander, discounts the Spetsnaz/airborne threat, he can be assured of armored and air assault raids.

# **Varfighting**

It is clear from the discussion so far that the Soviets have carefully constructed a massive military machine capable of deep operations.

Consequently, the Soviet theater warfighting strategy is centered on deep

strikes and offensive maneuver to seize the initiative and shift the focus of theater operations deep into NATO's rear.20

In our Corps rear area the objectives of these forces will range from nuclear delivery units and weapons (always first priority) through critical command and control nodes to key logistical facilities.<sup>21</sup> Additional objectives are likely to include vital transport and communications chokepoints, major airfields, grouping of reserves, and pieces of key terrain, possession of which would prevent the shifting of NATO units.<sup>22</sup>

From the previous discussion, it seems that the most likely Level III threats to the Corps rear will consist of divisional sized OMGs and air assault forces in battalion and regimental packages. In the Frontal main attack, an Army OMG of reinforced division size accompanied by forward detachments of battalion to regimental size, all intended to link up with multi-battalion air assaults, can be expected.<sup>23</sup> In the supporting attack of the Front, the use of forward detachments and single battalion air assaults is probable. The picture, as painted by Christopher Donnelly, is chilling enough:

"The aim of deploying an Army's OMG is to switch the focus of the fighting into the rear of the enemy formation; to destroy important objectives which cannot be destroyed by other means; to achieve chaos and disorganization; and to limit the freedom of maneuver and effectiveness of enemy action."24

The cumulative effect of these efforts would be to transfer the location of the decisive theater battle from the FEBA (and NATO's strength) to the far less well defended rear.<sup>25</sup>

# **Yulnerabilities**

All, however, is not hopeless. Upon closer examination, the Soviet deep attack concept reveals some structural vulnerabilities.

Much of the effectiveness of the deep attack is based upon the use of surprise, speed and various distractions (subsumed under the rubric of "maskirovka" by the Soviets) designed to immobilize NATO.26 NATO can counter this by exploiting its electronic surveillance and detection capabilities thereby receiving critical early warning. Additionally, by careful utilization of the increasingly urbanized and compartmentalized terrain the Soviet drive for speed can be seriously impeded. This will provide opportunities for aerial and artillery interdiction of Soviet lines of communication and units. Furthermore, the presence of a large and hostile civil populace can be expected to provide NATO with valuable intelligence that can be exploited as well.27

As Warsaw Pact forces commit large units to combat, the fog and friction of war will surely intervene. As our own wargames and exercises point out, the massive command and control problems associated with passing large forces through units in contact or across the FLOT will surely arise, lending themselves to MATO exploitation. Even before the above operation can be attempted, the Soviets must establish air superiority; if this effort can be denied the viability of deep operations is questionable.29

Still, it seems reasonable to assume that some Soviet units will succeed in penetrating to the Corps rear. Once this occurs, what are the vulnerabilities that can be attacked? As Richard Simpkin has observed,

\*...the role of the mobile force is not to fight but to move, not to give battle but to avoid it...\* Given the intent of Soviet forces in the rear is to spread destruction, terror and attack the moral domain in order to cause collapse, Simpkin seems correct in asserting that these deep attack elements will not willingly seek out combat. Consequently, the movements and actions of OMG and other deep attack commanders will be dictated by the results of their own reconnaissance and upon the information they receive from higher headquarters. Herein lies another vulnerability. If friendly forces can blind Soviet reconnaissance assets and jam his links to higher headquarters, the deep operation can be attacked through disruption of its command and control, as well as physical destruction.

Furthermore, any effort which slows down the progress of a deep attack force can contribute to its destruction by allowing defenders to mass against it. Finally, since OMGs and forward detachments must quickly advance, they will likely carry with them only minimum essential supplies. By denying replenishment of these forces through cutting of land lines of communication and by defending airfields targeted as resupply objectives, their effectiveness can be further curtailed.<sup>31</sup>

#### Summary

The Soviet threat to the rear area is well conceived and carefully supported. Based on a theoretical concept which attacks weakness, it seeks to disrupt the defense from the rear to enhance the chances of success of the overall offensive. It is part of a truly integrated vision of the total, non-linear battlefield we ourselves describe. With this in mind, let's turn our attention to US doctrine.

#### III. Current US Rear Battle Doctrine

Any attempt to identify a doctrinal role for the ACR in the Corps defensive rear battle must begin with a discussion of current doctrine.

The capstone manual of AirLand Battle, FM 100-5, Operations, describes the larger purpose of rear operations as permitting:

- 1. Assembly and movement of reserves
- 2. Redeployment of fire support
- 3. Maintenance and protection of sustainment effort
- 4. Maintenance of command and control32

From the above it can be seen that rear battle is a subset of rear operations. As such, it merits a separate manual, FM 90-14.

Rear battle is clearly defined in FM 90-14 as follows:

"Rear battle consists of those actions including area damage control, taken by all units (combat, combat support, combat service support and host nation) singly or in a combined effort to secure the force, neutralize or defeat enemy operations in the rear area, and ensure freedom of action in the deep and close in battles. It is a system designed to ensure continuous support. In turn it requires combat forces and planning to defeat the rear battle threat."<sup>33</sup> (Emphasis my own)

#### Operational Concept

It can be seen from this that the primary purpose of conducting the rear battle is focused around the operational concept of retaining freedom of action to conduct the close and deep battles. From this point, it follows that the end state desired is the defeat of any threat without preventing or significantly altering the plan of operations for the close or deep battles. "Success" in the rear battle at the expense of the close or deep battles or outright failure both spell defeat in the overall operational context of AirLand Battle Doctrine.

#### The Rear Battle

FM 90-14, Rear Battle, establishes a detailed structure for conducting the fight. Rear Area Operations Centers (RAOC) are established at division, corps (also Corps Support Group) and theater army command levels. The mission of the RAOC is to act as a tactical operations center for the rear battle and plan, coordinate, advise and conduct the rear battle.<sup>34</sup>

Commanding this fight is a Rear Battle Officer appointed by the Corps

Commander. The Rear Battle Officer locates in the RAOC which in turn is an element of the rear CP. The RB Officer may also control the rear CP.35

All CS/CSS units located in the rear establish bases with well defined, defensible perimeters controlled by a base defense operations center. Where possible, CSS facilities or groupings of units form base clusters under a base cluster operations center for enhanced protection. In this case, the senior base commander assumes control of the cluster and insures mutual support. 36

The manual goes on to outline a number of controlling doctrinal principles focusing on three main areas: unity of effort, economy of force and responsiveness. The unity of effort is directed at the uninterrupted support of the main effort and the protection of the rear area. Economy of force is described as using CSS units to defend themselves, thus freeing tactical combat forces for their primary missions. Responsiveness pertains to the immediate and effective reaction to threats.<sup>37</sup> (Emphasis my own)

Now, let us continue our exploration of existing doctrine with a look at how this all fits together at Corps.

Corps

Earlier in the paper, I addressed the importance of rear battle to the overall Corps operation. FM 100-15(Draft) carefully echoes the purpose and priorities of FM 90-14. However, it then makes a significant divergence. The Corps manual states that rear battle is a situational activity planned as a contingency. In light of our earlier discussion of Soviet doctrine, this seems too convenient an assumption. The manual goes on to say that the optimal tactical combat force for this "contingency mission" is a brigade. This is predicated upon the assumption that the most common threat will be an airborne or air assault regiment. To deal with this threat the preferred forces are attack helicopters with air assault infantry supported by artillery from corps field artillery brigades. Acc

Again, from our earlier discussion of Soviet intent, we can see that the assumption of an air delivered threat as the most probable ignores the high likelihood of significant ground attacks. However, continued reading of FM 100-15 does indirectly identify the possibility of other types of threats by stressing the need for continuous reconnaissance and timely intelligence collection and dissemination.<sup>41</sup>

# The ACR

The state of the state of

Charles and the second of the second

666666

It is now appropriate to take a look at how the Armored Cavalry
Regiment (ACR) fits into the rear battle. FM 100-15, Corps, provides some
employment considerations for the ACR in the defense. These revolve around
the use of the regiment in the traditional security missions of the
covering force.<sup>4,2</sup> Further reading reveals little guidance for the ACR in
the rear battle. It observes that heavy maneuver forces are not normally
dedicated to Corps rear operations until such time as significant Level III

threats materialize. Additionally, the ACR is specifically noted as not being "...generally suited as a rear operations force because of its lack of infantry to fight dismounted."<sup>43</sup> In short, the offensive and defensive capabilities and the independent operational ability of the regiment are ignored in the context of the rear battle.<sup>44</sup> The more traditional solution of tasking the Corps Aviation or Military Police Brigades with the Level !!! rear battle mission is put forth instead.

When we shift our attention to the point of the saber, and look at FN 17-95, Cavalry, we find a similar void in rear battle guidance. The manual, using out-dated terminology, acknowledges that cavalry units can expect rear area protection missions. It further states that cavalry units will receive "rear area combat operations" taskings but concentrates on minor tactics rather than the operational concept of rear battle. It completely fails to address the details of liaison, command and control, fire support, communications, intelligence preparation of the battlefield and the myriad of other functions required for rear battle. It also fails to cite FN 90-14 and, consequently, doesn't provide the essential purpose behind rear battle and its place in defeating an integrated threat deep attack.

The purpose in this doctrinal review has been to discover if our response is sufficient to counter the threat. As we have observed, this is not the case.

#### TCF Criteria

A 1976 study attempted to determine the optimal rear battle force.

Based upon the available information, it focused on countering the air inserted threat. We have since established that that threat is only part of

a broader picture. I believe that the criteria it established are still valid, however. Listed below (with an addition of my own) are those criteria:

- 1. Capability to prevent interruption of CS/CSS activities
- 2. Single organization able to plan, rehearse and execute combat missions
- 3. Ability to rapidly mass combat power at any location in the Corps area
- 4. Provide an airlift capability for a company sized force
- 5. Provide sufficient combat power to defeat a Level III ground threat of battalion size and delay and attrit one of regimental or division size (added by me)
- 6. Provide dedicated, flexible communications to net with civil police/agencies, as well as, military ones
- 7. Provide combat organization trained and equipped for day/night ground, air defense and counter airborne/air assault combat
- 8. Able to obtain detailed knowledge of terrain/environmental factors in the Corps rear
- 9. Have integrated intelligence systems to detect enemy threat
- 10. Provide single commander with authority and area responsibility for rear battle throughout the Corps area
- 11. Provide command structure with platoon/company commanders able to conduct limited independent operations47

Up to this point, the discussion has summarized rear battle doctrine and presented a criteria to define the attributes of a rear battle force.

The next logical step is to see how well the Armored Cavalry Regiment can fit into the doctrine as the rear battle force.

#### Armored Cavalry Regiment (ACR) (See figure 3)

The ACR provides a combat maneuver force of combined arms and services to perform reconnaissance and combat security operations as an economy of force over wide areas and in all types of terrain and weather. It is designed to operate either as part of the Corps or as an independent force. The basic tasks of the ACR (reconnaissance and security) are accomplished through the use of combined arms from scout team through the regiment.

Structured to fight in order to gain information or provide security, the regiment has organic field and air defense artillery, attack, scout and lift helicopters, engineer, intelligence, chemical, and service support elements. Due to its combined arms structure, the regiment has the ability to conduct decentralized operations by exploiting the autonomous operating capabilities of its squadrons. These units have the capacity to further decentralize operations to troop and platoon level.<sup>49</sup>

An examination of the ACR against the established criteria (see page 15) shows that it is ideally suited to perform the rear battle mission. Because its organization and structure favor operating independently, it can easily adapt to the dispersion of CSS units across the Corps rear. By employing its impressive combat power and mobility, multiplied by varied communications (AM, FM, RATT, Digital) and extensive reconnaissance assets, the ACR provides a combat force able to deal with threats at all levels. Its exceptional mobility and flexible communications enable it to work easily with military and civil police forces operating in the rear. This enhances the mutual effectiveness of all parties.

Due to the design intent of providing the Corps Commander with intelligence, the regiment can easily generate similar information about the rear for the RAOC. The use of ground and aeroscouts as part of an integrated intelligence and reconnaissance plan provides a highly mobile, all terrain surveillance capability for the rear battle. Acting as the "eyes" of the Corps Commander, the ACR can provide pro-active security to the widely scattered units in the rear. Additionally, it has the existing command and control assets to operate dispersed with dedicated, organic

supporting weapons or serve as a focal point around which to mass against Level III threats. This is a particularly valuable capability because it allows the regiment to meet the rear battle operational concept without automatically drawing forces from the MBA.

## Summary

This discussion clearly demonstrates the suitability of the Armored Cavalry Regiment for the rear battle mission. With the exception of limited airlift capability, the ACR meets both the spirit and the letter of the criteria for a rear battle force. Its organization, training and normal mode of operation dovetail perfectly with the requirements of the rear battle. In short, the ACR provides the tactical combat force necessary to fill the doctrinal void that has been identified.

Can this logical role for the cavalry stand up to the harsh light of actual combat experience or is it merely a nice theory? To answer this, we must turn to the results of history for guidance.

EXPLOSED PROFESSION NONDON CONTRACTOR STORES SERVICES SER

# IV. Historical Inquiry

One of the best ways to examine the validity of a theoretical proposition is to test it against historical experience. To do this, I have chosen three historical vignettes, each intented to look at a different rear battle problem. In keeping with the original research question, I am seeking to study how units comparable in responsibilities to a modern US corps responded to rear battle challenges.

# Operation Market Garden

#### The Airborne Threat

The allied situation on the Western Front had bogged down in stiffening German resistance after the heady days of August, 1944. In the north, Field Marshal Montgomery sought to turn the right flank of the German defenses of the West Wall. (See figure 4) In early September, General Eisenhower gave Montgomery permission to try and seize a Rhine bridgehead as part of an ambitious plan to employ the allied airborne army. This plan, code named Market-Garden, involved the dropping of three allied airborne divisions (Operation Market) in an "airborne carpet" to seize seven key bridges over which the British Second Army, spear-headed by 30th Corps, would advance (Operation Garden) across the Rhine.

Bold in conception, the plan envisioned a single corps advance of 64 miles along a narrow corridor defined by one all weather road. Directed at the northernmost bridge at Arnhem, the operation depended upon all seven bridges being seized and held by airborne troops until an armored linkup could be conducted. 52

The rest of this narrative will focus on the British action and German reaction to the attempted seizure of the critical Arnhem bridge.

The Drop

\*\*\*\*\*

CONTRACTOR STATEMENT DESCRIPTION DESCRIPTION

Anxious to carry out a major airborne operation, allied intelligence foresaw only "small numbers of hastily organized defense units in the Arnhem area not amounting to more than a brigade at most." Unknown to the allies (despite some photo recce evidence) the II SS Panzer Korps was refitting in the general area of Arnhem. This corps consisted of the 9th (Hohenstaufen) and 10th (Frundsberg) SS Panzer Divisions. Divisions in name only, they mustered about 9,500 men, 35 tanks and 40 other armored vehicles. Both units had substantial artillery, mortar and anti-aircraft weapons and functional headquarters elements. 54

The first airborne landings began at 1400 hours on the 17th of September; at 1430 hours, the 30th Corps began the ground attack. Further north, the British 1st Airborne Division, landing seven miles west of Arnhem, found they could only secure the north end of this critical bridge. See figure 5)

Despite allied disappointment at initial results, the Germans were badly shaken by the unexpected drops. The main British drop zones were close enough to the undiscovered headquarters of General Model (Army Group B) to cause him to believe their intent was his capture. His rather panicky evacuation completely disrupted the operations of his headquarters for several hours. Despite this fiasco, the initial German reaction was prompt. Later, the effects of this rapid response were to be enhanced by

poor weather over the marshalling airfields and drop zones and the fierce German resistence to the linkup effort.

#### The Reaction

The British forces found the German reaction to be unpleasantly quick, if somewhat disjointed. The fortuitous positioning of the 9th and 10th Panzer Divisions in the Arnhem area allowed a rapid and powerful armored riposte to be mounted against the allied drops. The one instance, an under-strength panzergrenadier training battalion equipped with some half tracked carriers, light automatic weapons and multiple rocket launchers, found itself on a British drop zone. Immediately attacking in platoon and company groups, they caused much delay and confusion for the assembling British. Even though these units were not designated formally as rear battle forces, their rapid action serves to illustrate vividly the agility differential between airborne and armored units. A critical result of such actions was that the British managed to get but a single battalion to the Arnhem bridge and only secured the north end before they were cut off from the main body of the 1st British Airborne.

#### The Result

Even as the British consolidated their landing and drop zones and tried to make contact with the 2d Battalion at the bridge, the Germans began to launch coordinated attacks with armor and infantry on the airhead. General von Bittrich, the <u>II SS Panzer Korps</u> commander, quickly began shifting his divisions. Within five minutes of the main body drop, Bittrich had issued orders to both divisions to move toward Arnhem and Mijmegan to hold the bridges and to reduce airheads. The rapid appraisal of the larger

implications of the landings resulted in the Germans moving forces to block the route of the 30th Corps, thus further threatening the 1st British Airborne.

After an epic battle to hold on to the north side of the Arnhem bridge, the 2d Battalion was forced to surrender on 21 September. This one battalion had been cut off from the division since the drop and had fought elements of a panzer division almost unaided.

This surrender marked the beginning of the end for the "paras."

Concentric pressure by the 9th and 10th <u>Panzer</u> divisions ruthlessly

compressed the perimeter of the Red Devils. Pounded by artillery, mortars
and tanks, the division was ground to pieces.<sup>63</sup>

Poor weather from the 21st on, combined with heavy German attacks on the narrow linkup corridor, dubbed "Hell's Highway", slowed the drive of 30th Corps. Although 30 Corps reached the Lek River and could support the paratroops with fire, it could not make the linkup. (See figure 6) The decision was accordingly made to withdraw the airborne troops from their bridgehead starting on 25 September. On the night of 25-26 September, the division recrossed the Rhine and withdrew. All the remaining heavy weapons and most of the wounded had to be left behind. Of the 10,005 soldiers committed to battle only 2,163 men withdrew across the river.

PROPERTY STREET, DANSONWINGSTON

2555555

ACCOUNT TO THE PROPERTY OF THE

B.H. Liddel-Hart, the British military theorist, summed up the operation as follows:

"The obviousness of the aim simplified the opponents problem in concentrating his available reserves to hold the final stepping stone, and to overthrow the British airborne forces there, before the leading troops of the 2d Army arrived to relieve them. The nature of the Dutch countryside with its 'canalized' routes, also helped the defender in obstructing

the advance, while there was a lack of wider moves to mask the directness of the approach and to distract the defender."

# Rear Battle Insights

I believe the experience of the British at Arnhem can provide insights on dealing with an airborne or air assault threat today. The German action showed that a key to destroying an airhead is to isolate it rapidly using mobile forces under the control of a tactical headquarters. Another is the need to attack immediately with any available forces into the DZ/LZ. This critical landing period is the best time to smash the insertion.

Another clear lesson is that a mobility and firepower differential over airborne and air assault forces is vital. The ability of the Germans to out-maneuver and out-shoot the British resulted in crippling losses to the slower, out-gunned paratroops. This is reinforced today when we reflect upon the armored firepower available to the Soviets in their BMD and ASU family of vehicles.

The German use of their panzergrenadier (infantry) units in conjunction with the armored units provided a powerful combat multiplier. Despite the quantum increase in the lethality of modern fighting vehicles, the infantry remains a vital element in eliminating air inserted threats. Although the Germans annihilated the 1st British Airborne as a unit it was at a substantial cost in casualties to themselves.<sup>67</sup> It should be noted that infantry strength is a deficiency of the modern ACR. It would have to be reinforced or substitute its scouts for infantry in this role. One of the reasons the lightly armed airborne troops were able to put up such a fierce defense was their exploitation of the urban terrain in general. Since much

of NATO is now urbanized, this lesson should not be lost on us. The difficulty the Nazi units experienced in rooting out the British will likely be repeated in the future if a Soviet air-inserted force goes to ground.

An interesting point of comparison in this example is the number of armored vehicles available to the Germans versus the number of armored fighting vehicles in an ACR. In total, the two German divisions fielded about 80 tanks and 40 plus armored personnel carriers in addition to some self-propelled guns and artillery. In contrast to this, the modern armored cavalry regiment, at full strength, can field 123 K1 tanks, 116 cavalry fighting vehicles, 24 155mm howitzers, 18 107mm mortars and 34 anti-air systems (Vulcan/Stingers).

From this discussion, it is clear that the armored cavalry regiment has most of the capabilities to meet a similar challenge in the NATO arena: speed, firepower, armor protection, communications, an adequate headquarters and intelligence structure, support assets and the training to deal with Soviet airborne units.

# Chir River, the Armor Threat

Let's look now at a different type of rear battle threat, a major armored force penetration into the rear of the main battle area. The German response to the threat is a classic illustration of how a dedicated tactical force can wage rear battle even though at the time it was not intended as such.

The <u>Wehrmacht</u> campaign of 1942 had ground to a halt following the disastrous encirclement of the Sixth Army at Stalingrad. In the south, 4th Panzer Army under Hoth was preparing to relieve Stalingrad when it was

struck by major Russian counterattacks. The main combat power of the 4th Panzer Army was found in the 48th Panzer Korps containing the 11th Panzer Division, the 336th Infantry Division and the 1st Luftwaffe Field Division.

All these units were understrength with the 1st Luftwaffe being the weakest in combat power due to poor training and leadership.

The crisis along the Chir River began when the Russians struck in a massive spoiling attack. On 6 December, the 336ID was in position along the Chir River between Mizhna Chirskaya and Surovikino. (See figure 7) Early on the 7th, the 1st Russian Armored Corps forced the line of the Chir and penetrated to State Farm 79 on the left flank of the 336ID. This thrust extended about 15 miles into the corps rear and threatened its ability to hold.70

# The Fire Brigade

---

COOCESCION DE SECRETARION DE SECONO DE LA COCCO DE LA

The corps immediately diverted the 11Pz Div to restore the situation. By 7 December, Pz Regt 15 of the 11 Pz Div had engaged and checked the advance of the Russian force while the rest of the division prepared to attack in strength. As soon as the situation had stabilized, General Balck (commanding the 11th Pz Div) co-located his division headquarters along side that of the 336ID to allow the proper coordination of the rear battle.

Replacing the panzer regiment with <u>Panzergrenadier</u> Regiment 110 to hold the Russians, von Balck attacked into the Russian rear on 8 December. The Russians were in the process of forming up and were surprised in column by the dawn onslaught. The shock and destruction (Soviets lost 53 tanks) were such that the 1st Russian Armored Corps collapsed.<sup>72</sup>

The destruction of the 1st Corps marked the beginning of continuous fighting for the 11th Panzers. From 9-13 December, the 11th found itself constantly involved in eliminating bridgeheads across the Chir while the 1 Lw FD and the 336ID struggled to hold a 40 mile front. During this perilous time, close coordination was maintained between the 11Pz and 336ID headquarters. Fightly meetings with the Corps Commander kept General Balck current on the overall picture and enabled him to focus the efforts of his staff as they planned the rear battle effort.73

From 11 to 13 December, the 11th <u>Panzer</u> found itself committed to deal with two penetrations at Lissinski and Wizhna. (See figure 8) Using the 336ID as a shield and pivot, the 11th eliminated or contained each penetration in turn. Relying on grueling night marches and day attacks, the division continually struck the flanks and rear of Russian units.<sup>74</sup>

The 17th of December saw the initiation of a new Soviet offensive which soon penetrated the 336ID some six miles north of Mizhna Chirskaya. As 11 Pz moved against this penetration, several Soviet motorized corps (175 tanks each by TO&E) broke through on a wide front tenuously held by the unreliable 1 Lw FD. The 11th was immediately tasked to deal with this threat. By dawn on the 18th, von Balck was ready to attack. Using Grenadier Regiment 110 to block frontally, he attacked into the flanks of the Russians, with 25 panzers, destroying 66 enemy tanks and causing the remainder to flee."

By 22 December, the Chir River battles had ended and the 48 <u>Panzer</u>
Korps was sent westward for other action.

ᡛᠹᡛᡮᡛᡧᡛᠰᡛ᠕ᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᠰᡛᢥᡛᢥᡛᢥᡛᢥᡛᢋᠮᢌᡛᡪᡭᢌᢗᢌᡛᢌᡛᢠᡛᢠᡛᢠᡛᢠᢞᢠᡳᡛᢌᡛᢌᡛᢌᡛᢌᡸᢌᡸᢌᠮᢌᡸᢐᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌᡱᢌ

# Insights

The 11th Panzer Division performed missions which can be viewed today as classic examples of rear battle operations. The success of these actions clearly shows the value of a dedicated rear battle force of the right composition. The fluidity of the situation demonstrates the need for an established, experienced chain of command able to cope with constant change. The dangers of relying upon ad-hoc commands is vividly demonstrated by the failures of the well equipped but poorly trained and led Luftwaffe Field Division. Additionally, this vignette demonstrates the particular utility of a force familiar with the terrain in the rear and able to exploit it.

Once again, it is striking to observe the effect the Germans gained with a relatively small number of combat vehicles and to reflect upon how to achieve those results today using a modern ACR.

The tactical situation faced by the 48th <u>Panzer Korps</u> is likely to be similar to that expected by a NATO corps. The key point of this discussion is that a dedicated force fought a rear threat while the NBA battles raged unabated. German perceptions aside, the 11th <u>Panzers</u> demonstrated the plausibility of the dedicated force concept and provide a glimpse of the possibilities today.

The final vignette is intended to provide a glimpse of the costs associated with inadequate rear battle planning.

# The 7th AD in the Bulge

The choice of the 7th Armored Division (7AD) and its stand at St. Vith during the Battle of the Bulge is designed to be an examination of the

chaos attendant to fighting a rear battle without a plan and using ad-hoc forces.

The German Ardennes offensive of December, 1944, dubbed the Battle of the Bulge by the allies, was literally a "bolt from the blue" to the soldiers involved. The Ardennes was viewed by the Americans as a quiet sector and was used as an economy of force area after the bitter fighting of the autumn. Charles B. NacDonald, in his book, The Siegfried Line Campaign, called this area a "...combination nursery and old folks home..." where tired units rested and new ones trained.

Defending this area of rugged terrain, some 90 miles wide, was the VIII (US) Corps commanded by MG Troy H. Middelton. He covered this wide sector with parts of four divisions and one understrength cavalry group as part of LTG Courtney Hodges' 1st US Army.

#### The Battle

SECOND AND THE PROPERTY OF THE

The German plan for the Ardennes offensive was a bold gamble by
Hitler. Its objective was the port of Antwerp and the creation of discord
amongst the Allies leading to a separate peace. Planning had begun, at
Hitler's insistence, in September of 1944 and had continued in great secrecy
and haste thereafter. To conduct this major operation, the Wehrmacht
assembled its last significant reserves in the West. These forces
consisted of three assault armies composed of seven panzer divisions, 10
volksgrenadier divisions, one parachute division, the Skorzeny brigade
(commandos in American uniforms and equipment) and reserves totalling five
additional divisions and two brigades of the Fuhrer Escort plus
substantial artillery.79

The "schwerpunkt" of this massive attack was pointed squarely at the VIII Corps. (See figure 9) Of its four divisions, the 4th and 28th Infantry had been badly chewed up in the Huertgen Forest battles. The other two divisions, the 106ID and the 9AD, were untried units new to combat. The understrength 14th Cavalry Group (2 of 3 squadrons) was spread out to maintain contact with V Corps to the north.

Middleton disposed his units with the 106ID defending in the north, the 28ID in the center and the 4ID holding the remainder of the sector. In reserve was one combat command of the new 9AD.

The saga of the 7th Armored Division covers the period from 16 to 21 December 1944. A brief chronology of events will provide a good idea of the intensity of the action:

- \* 16 Dec- Detached from 9th Army and alerted for deployment to St. Vith
- \* 17 Dec- Deployed to St. Vith
- \* 17-21 Dec- Defended St. With against elements of 5th and 6th Panzer armies
- ₱ 21 Dec- Held along Salm River until XVIII Corps ordered withdrawals:

Tasked to retrieve the situation for VIII Corps, 7AD was thrown into combat. Lacking proper intelligence and with very little combat or service support, the division was forced to improvise as it went along. The only good news in this dismal picture was that the division was at nearly full strength.

When the division was committed to battle on 17 December, the situation was extremely confused. No corps rear battle plan existed, much of the front was crumbling and the available reserves had been committed. A

literal rout was in progress with most units broken into small groups streaming west without effective leadership.\*\*3

To compound the problem, the command and control lash-up in St. Vith was guaranteed to breed confusion. General Middleton, at VIII Corps, had not provided clear guidance or explicit missions to General Hasbrouck, commanding 7AD. This resulted in four general officers trying to fight the battle around St. Vith. (MG Jones, CG, 106ID; MG Hasbrouck, CG, 7AD; BG Clarke, commander CCB, 7AD; BG Hoge, commander, CCB 9AD)(114) In order to get a grip on the crisis, MG Hasbrouck "gradually assumed command" of all elements in the area. He eventually decided that his mission would be to impose maximum delay upon the Germans without sacrificing his command. At the point where he was about to be decisively engaged, he would give ground then counterattack to impose futher delay.

Construction Construction (Construction)

33:23333

CARREST BEST SCHOOL BOX SCHOOL

13223223

Slowly, as the commanders sorted out their plans, pieces of tactical units from the shattered VIII Corps were formed into ad-hoc formations and thrown into battle to man the rapidly coalescing perimeters. These measures were those of desperation as the positions occupied were often tenuously held and out of contact with flank units. Nevertheless, CCB of 7AD was committed to a perimeter defense in a wide arc around St. Vith, relying on its mobility and the restrictive terrain to help it defend outnumbered. (See figure 10)

The 7th tried to integrate existing CS and CSS units into the defense without much success. Likewise, command and control and fire support of these scratch units was spotty. Similar difficulties can be imagined today as a tactical combat force tries to reform the defense or deal with a

major penetration amidst the physical and moral debris of a successful enemy attack. Still, despite the carnage, confusion and fear, many units performed with courage and determination. This was ably demonstrated by the combat trains of the 7AD. The commander of the division trains understood his requirement to move supplies, defend himself and protect the division rear. To accomplish these missions he established 12 roadblocks. These positions secured two vital towns from which he operated the trains and helped to hold the division main supply route. It is significant to note that this effort was from the 7AD, not from corps or army CSS units originally in place.

Combat Command B of the 7AD lost heavily in the defense of the town.

Over 900 soldiers, most of the tank destroyers and 7 of 11 initially available tanks were lost. In light of these casualties and the probability of continued, heavy German attack, Clarke withdrew about 1000 yards west of St. Vith and tied in again with CCB, 9AD.

Despite these efforts, the situation was still grim. Although contact had been established with the 82d Airborne Division to the west, MG Hasbrouck feared that with nearly half his combat power gone he would be sacrificing his division if he continued to hold. General Ridgeway, now in overall command, agreed and authorized the withdrawal of the division. 51

The stand of the 7th Armored Division in St. Vith was a remarkable effort conducted with skill and courage. Its obstinate stand in St. Vith derailed the German timetable and caused significant losses and disruption. However, the tactical skill and heroism displayed by the division cannot hide the fact that there was no rear battle plan for VIII

Corps and that this failure had strategic (SHAEF reserves committed) and operational (Patton's 3d Army diverted) repercussions. A workable rear battle plan may not have guaranteed the defeat of the massive German effort, but it would probably have made the fight less costly, confusing and more effective in the long run.

## Insights

COLUMN DESCRIPTION DE CONTRACTOR DE CONTRACT

WASSELF RESISTANT NUMBER OF THE PROPERTY OF TH

This action should be viewed as an example of the difficulties that a current day tactical combat force suddenly chopped to a RAOC to wage a rear battle could expect to encounter. From that perspective an analysis of the fight points out an inescapable fact: the cost of not thinking through an appropriate rear battle plan at each echelon of command and the consequences of this failure tactically and operationally. Other, more specific observations emerge as well.

Ad-hoc arrangements for support proved unequal to the mission. The CS/CSS units from army and corps level originally in the pocket were unable to offer organized resistence until the 7AD arrived to "take charge of the fight". This does not bode well for our current doctrine of expecting CS and CSS units to be able to fight successfully until the TCF arrives.

Meither does it promise much success in putting together support "on the fly" for a TCF that arrives in the welter of confusion sure to surround a rear battle. The use of a complete division at St. Vith solved many of the problems of combat and service support by using organic division assets. In this light, today's reliance for support upon separate corps units seems misplaced.

7AD fought well because of training, experience and leadership; the 106th fell apart because of a lack of the same. The corollary to this today may be that CSS units not trained for combat and appropriately led can't be expected to fight in the manner our doctrine envisions. Without the proper planning, training and dedicated units to fight, rear battle can become almost impossible to wage successfully.

## Summary

Based upon the historical examples cited above it seems clear that a force analogous to a modern ACR can successfully perform rear battle for a corps. The ability of cavalry units to move fast, develop the situation and strike decisively are exactly the attributes demanded of successful rear battle forces. Therefore, the doctrinal conclusions reached earlier seem borne out by historical experience.

It is appropriate now to analyze our rear battle doctrine in light of the theoretical and historical discussions to see if it measures up. It is only from this critical analysis that we might draw answers to our original question.

V. Analysis of US Rear Battle Doctrine and Capabilities

The following analysis draws upon our earlier description of US and

Soviet doctrine and the historical vignettes in order to answer the

original question on the role of the ACR in the Corps rear battle. It is a

critical look at what is, in an attempt to define what ought to be.

Principles of War

POLICIO POR PORTA DE PORTA DE

A close examination of US doctrine reveals of inconsistencies which threaten the integrity of the concept. The first problem lies in the doctrine's violations of the principles of war of mass, offensive, unity of command, and economy of force.

- 1. Mass: Defined as the concentration of combat power at the decisive place and time by FM100-5, this principle is almost doctrinally precluded by the structure of the rear battle system. FM90-14 states that threatened CS/CSS units must be prepared to defend themselves against enemy forces. It goes on to say that:
  - "...when enemy forces exceed base defense capabilities, military police may provide the initial force to close with and destroy the enemy. If an enemy incursion exceeds the capability of units (MP, CSS) in the rear battle, combat forces will be assigned to the rear battle to neutralize the threat.""

This attempt to avoid initially tasking any tactical combat force by relying upon CSS self-defense and sequential commitment of MP forces encourages piecemeal commitment of such forces. Gradualism of this sort is the antithesis of mass.

2. Offensive: Explained as seizing, retaining and exploiting the initiative in FM100-5, this principle suffers from the same problems as

described above. By deliberately adopting a false "economy of force" and relying upon scattered MP units as the initial rear battle force, the doctrine concedes the initiative in the rear to the enemy. Given the paucity of firepower in CSS units and the only slightly more heavily armed MP forces, the doctrine makes no attempt to maintain and retain the initiative by offensive action beyond level I.

3. <u>Unity of command</u>: This principle is defined in FM 100-5 as ensuring unity of effort under one responsible commander for every objective. While the operational concept clearly focuses on a single objective, the doctrine misses that battle focus. One glance at the chains of command established for rear battle is enough to demonstrate the failure of this principle. (See figures 11 and 12)

This principle is best implemented by a dedicated TCF working as an integral part of the RAOC prior to combat. The TCF commander would serve as a special staff officer (both commander and adviser) to the Rear Battle Officer. This would insure synchronization between the RAOC, the TCF and all CSS units in the rear. Instead, the RAOC attempts to develop contigency support plans for an "on call" TCF. This unit may or may not be able to pre-coordinate with the RAOC and will probably be unfamiliar with its procedures and subordinate CSS elements. This layering of headquarters and diffusing of responsibilities will complicate decision making and slow responsiveness. Se

4. Economy of force: This principle is described as a reciprocal of the principle of mass in that it is the allocation of minimum essential combat power to secondary efforts.(FM100-5) It requires the prudent

main effort. The question then becomes, what is a prudent risk? Given our earlier discussion of the threat, I submit the doctrine is practicing a dangerous and false economy. CSS units are barely capable of securing themselves against Level I threats and the MPs will reach saturation with Level II threats. There is no realistic plan to deal with Level III at all unless a dedicated TCF is appointed. Herein lies the false economy.

The rear battle violations of these principles of war seriously reduce the doctrine's chance of success. These fundamental failures jeopardize the operational concept from the very start. Knowing that the Soviets plan to attack the rear with forces capable of overwhelming the defenses of CS/CSS units and not taking effective counter-measures is courting disaster.

# Rescurce Shortages

The dichotomy of US doctrine is that it recognizes the full spectrum of the threat, but does not allocate resources commensurate to the danger. CSS units can possibly handle Level I threats, but lack training, equipment and weapons for much else. They are very lightly armed with no anti-armor weapons larger than LAWs and have few automatic weapons. The absence of night observation devices, electronic early warning/intrusion devices and adequate numbers of radios and telephones make the idea of self-defense debatable. Even when MP units do respond, the attackers can probably count on an hour to conduct their missions with minimal effective resistance.

The inadequate training and combat power of the MPs and CSS units in the rear provide too slender a base upon which to build a viable defense.

To compensate by using MBA forces in the rear when an ACR is available is redundant and violates the operational concept. Finally, the gradualism the doctrine encourages in the application of combat power and the delays in committment of a TCF go a long way in insuring that when an adequate force does arrive on the scene it will be too late.

The use of the ACR for the dedicated TCF can reduce the problems cited above. The regiment's combat power can deal with the likely threat quickly and decisively without automatically compromising the operational concept. Organized for independent operations, it can greatly simplify the chain of command by planning in advance for its needs with the RAOC. It is the cavalry then, that finally provides the Rear Battle Officer with a realistic chance of seizing and retaining the initiative.

## C=/CSS

CONTRACTOR CONTRACTOR

Two other areas cast doubt upon the practicality of the rear battle doctrine. They are the complex command and control structure and the need for ad-hoc provisioning of service support to a TCF when committed.

The ACR can help reduce some of the complexities of command and control by using its own staff to perform operational planning in continous coordination with the RAOC. The staff is familiar with employment of organic maneuver and fire support assets and can more readily integrate additional fire and close air support means than can the RAOC.

Concerning the latter problem, the ACR has a great deal to offer.

Equipped with its own CSS units and accustomed to drawing support directly from Corps, the regiment can operate easily in the rear. Furthermore, as

the designated TCF, the cavalry's needs can be easily anticipated by the RAOC.

## Costs

S. (3) S. (5) S.

WARRIE SOURCE WAS AND FOUND

KKKKKK PROCESS BEKKKKK PROVINCE BEKKK

Dedicating the ACR as a rear battle asset carries with it some costs. These include the inability to perform MBA missions after the completion of the covering force fight. Tasking the regiment as a rear battle force will remove it as a reserve for the Corps close battle. While it can no longer fulfill economy of force roles in the MBA, it can contribute greatly in an economy of force role in the rear by securing it and assuring the commander the freedom of action to move forces and concentrate on the close fight. Similarly, security missions (such as screens in the MBA or on flanks) will probably not be possible. However, missions of this type during the defense are relatively rare and the impact of their loss would probably be small.

The above costs need to be balanced against possible benefits. The use of the ACR in the rear will provide great assistance to the RAOC and the Corps rear CP in the terrain management and battlefield circulation problem. Tracking both friendly and enemy units in the rear will complement the efforts of the MPs and provide vital intelligence. Another major benefit will be realized in relieving MBA units from having to plan and monitor both the close and rear battle. This becomes significant as multiple planning contingencies start to overwhelm reserve units.

One of the key considerations in deciding whether to assign the rear battle mission to the ACR will be the condition it is in after the covering force battle. It is here that the "prudent risk" discussed in FM 100-5 can

best be employed. Since the Corps commander habitually expresses the degree of risk he is willing to accept in the security area? by giving the covering force commander a minimum level of combat power below which he cannot fall) he already has a means to measure the ability of the ACR to perform the rear battle mission after it hands off to the MBA. This risk assessment process lends itself to estimating when and if the ACR can accept the rear battle mission.

Doctrinal inconsistencies, cumbersome command arrangements, inadequate resources and an unrealistic view of the threat all characterize US rear battle doctrine. In the next section we will see how the cavalry can come to the rescue by correcting some of these problems.

## VI. Conclusions and Recommendations

In this paper, I have spent much time analyzing the content and structure of US and Soviet rear battle doctrine. My conclusions are summarized below:

- 1. Soviet doctrine requires deep attacks and is resourced to do so.
- 2. US doctrine recognizes the threat but does not dedicate resources adequate to counter it at all levels.
- 3. US doctrine refuses to designate an adequate TCF for rear battle, relying instead upon contingency forces.
- 4. There is no doctrinal definition of the desired attributes of a rear battle force.
- 5. The ACR is well suited to fulfilling the Corps rear battle mission but has no doctrinal mandate to do so.

## Recommendations

The discussion argues for a new role for the ACR in the Corps rear battle. The regiment has the capability to assist the Corps in taking charge of the rear battle and eliminating or severely reducing the enemy.

This proposal recognizes an integrated enemy threat and preserves the operational concept of the rear battle by using a force that is not necessarily part of the MBA to destroy that threat. Finally, as has been demonstrated, the ACR is the type unit that best matches the criteria established for the optimum rear battle force.

The employment of the ACR as a dedicated rear battle asset adds to its tactical repertoire without excluding any existing doctrine or requiring any TO&E changes. It exploits the flexibility of cavalry by insuring that its reconnaissance capability and mobility will be put to best use. The mission, in fact, may be considered a classic economy of force mission; a forte of cavalry units.

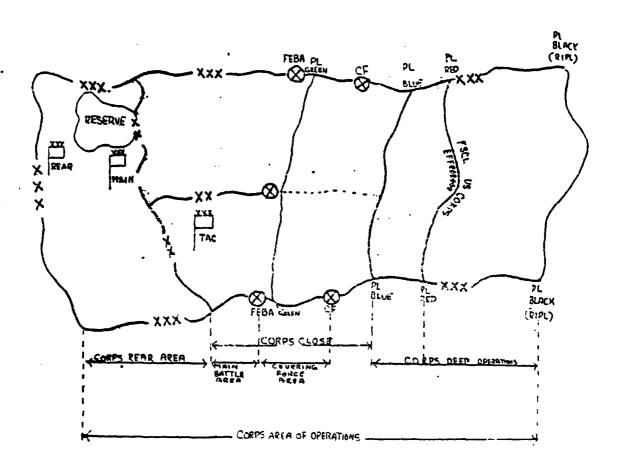
2000 Physical Research Bostons

While not a panacea, the ACR provides an excellent interface with existing doctrine and forces by complementing their strengths and buttressing their weaknesses. As always, the selection of the ACR to perform the rear battle mission at Corps should be subject to the a METT-T analysis. If the circumstances are appropriate, the regiment ought to assume the mission and doctrine should support it.

Finally, the inclusion of a doctrinal rear battle mission at Corps level does not conflict with existing cavalry doctrine. In fact, the only changes necessary to doctrine are the inclusion of the mission and an enumeration of the rationale and coordination measures already spelled out in FM 90-14, Rear Battle, into FM 17-95, Cavalry, and FM 100-15, Corps Operations.

The proper role for the Armored Cavalry Regiment in the Corps defensive rear battle is that of the designated tactical combat force. It is only through bold action that decision can be had in war. The ACR

provides the Corps Commander with just the right weapon to seize the initiative in the deadly struggle behind the FLOT. By recognizing and filling the existing doctrinal void with this new mission, the cavalry can once again "arrive in the nick of time" for beleagured CSS units and help insure final victory.



Sections Courses Issues

Tigure 1

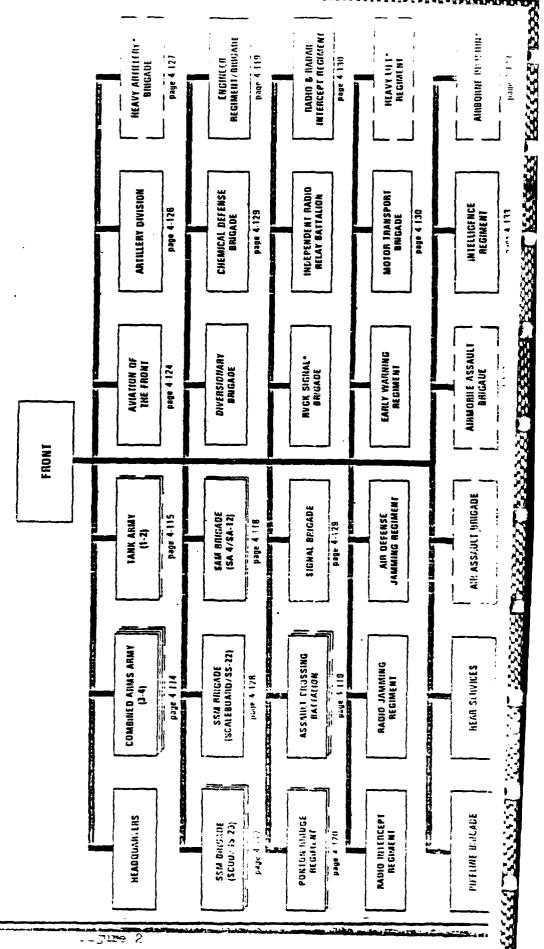
front

A Soviet finit consists of a headquarters and several subordinate field annies. Although the types and number of annies vary, a typical front could have three or four combined annis armies and one or two tank armies. The cominal support and combat service support units organic to and allocated to a front also vary based on its mission.

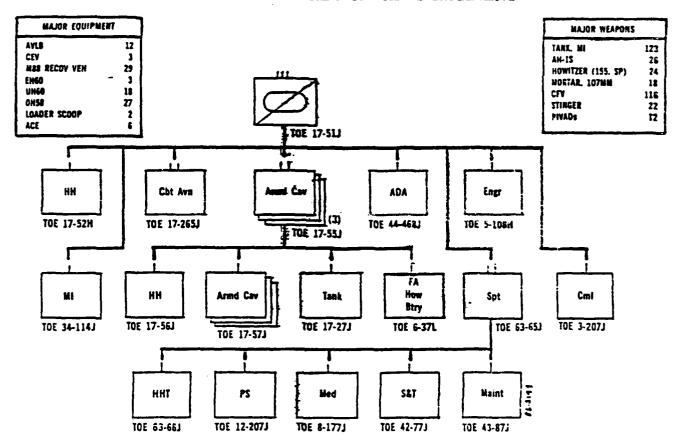
Oue to the large number of *Hont*-level units, it is impossible to construct a sample *Hont* structure. Instead, the following chart depicts all the different units that could be

Associated with any given front. Not all fronts would have all these muis present, and many of the writs may be modified to suit the particular needs of the font. More than one of sume units (e.g. SCUD/SS-23 brigade or pouton bridge regiment) viil probably be present.

The following pages provide detailed breakouts of each unit wherever possible. Those units that are similar for both army and trant are located in the army postion of this volume.



# Section VI. ARMORED CAVALRY REGIMENT



## 1. MISSION

and Versezera Caraman Integration Caracasa Caraman Caraman Leadenger

To provide a combat maneuver force of combined arms and services to perform reconnaissance and combat security operations as an economy of force.

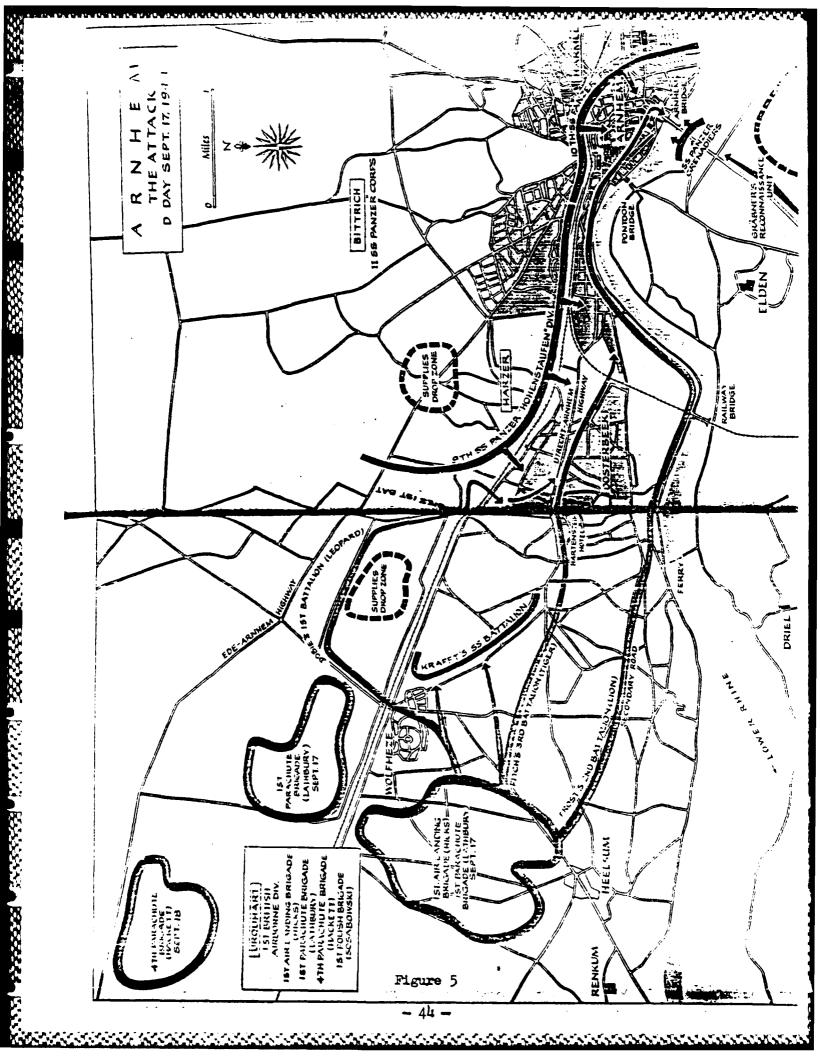
# 2. ASSIGNMENT

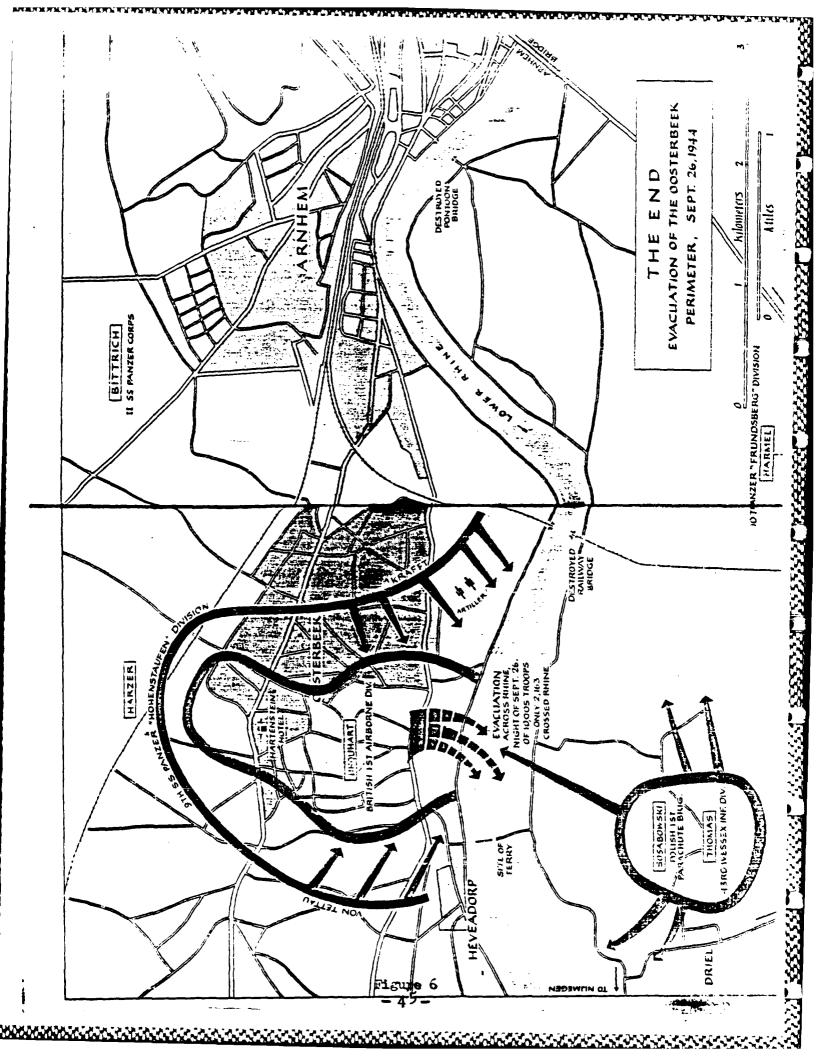
To corps, TOE 52.

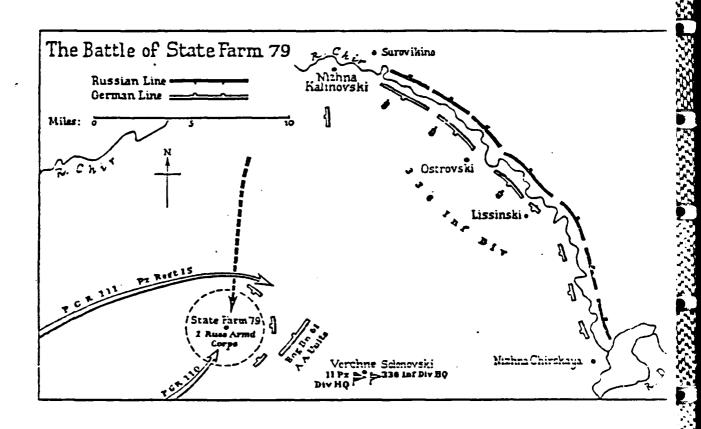
Figure 3

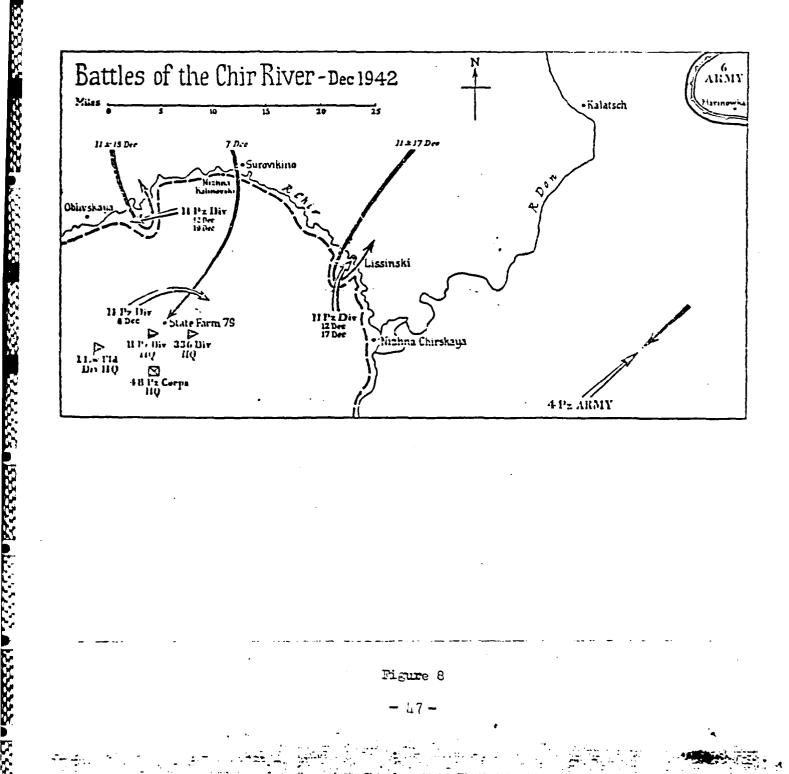
5 E 4 Beekbergen . The Hague Urrecht HARZER'S 9TH 35 PANZER HOHEMSTAUFER DILER Rotterdam Oosterbeek = = MODEL'S HO. SEPT. 15 Doctinchem BITTRICH'S HQ. ND NIJMEGEN Vuaht STUDENT'S HQ. Tilburg • STUDENT'S FIRST VON ZANGEN'S FIFTEENTH ARMY FRONT LINE SEPT. 14/44 • Disseidort DEMPSEY'S BR CRERAR'S CAN G RMA BELGIUM Maastricht ( HODGES ILS. GERMAN SEVENTH ARMY Arenberg BITTRICH'S IT SS PANZER CORPS BRADLEYS SIEGFRIED LINE Luxembourg THE FRONT, SEPT. 14, 1944 BLASCOWITE Reims Ε SANR Verdun. Metz PATTON'S U.S. Miles Flgure 4 **-** 43 -

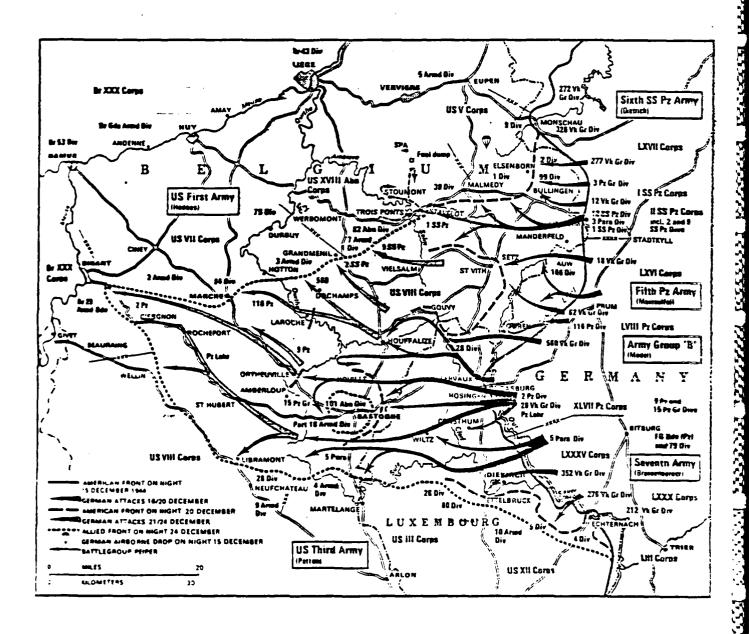
\$\;\{\alpha\











\$\rightarrow\rightarro

Figure 9

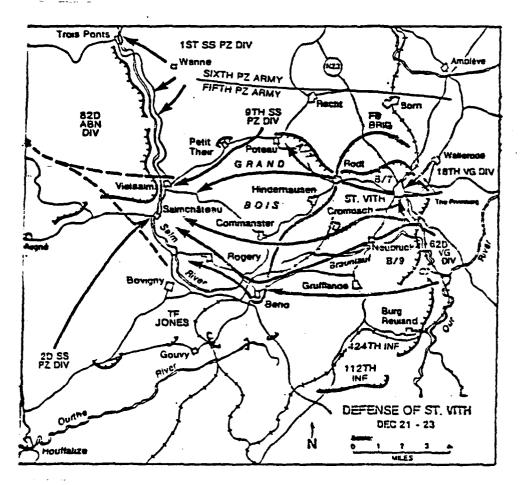
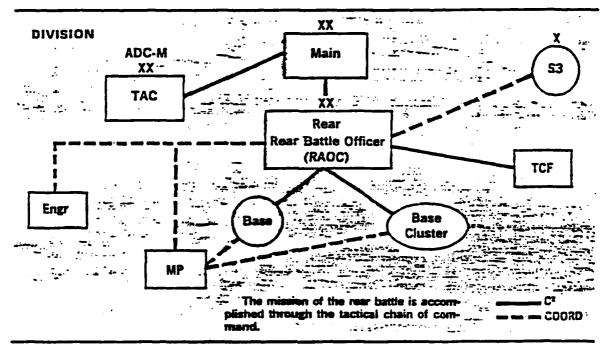


Figure 10 - 49 -

est Macconstant Accossocial Diseasocial Pressures

# CHAINS OF COMMAND

# Tactical Chains of Command for the Rear Battle.



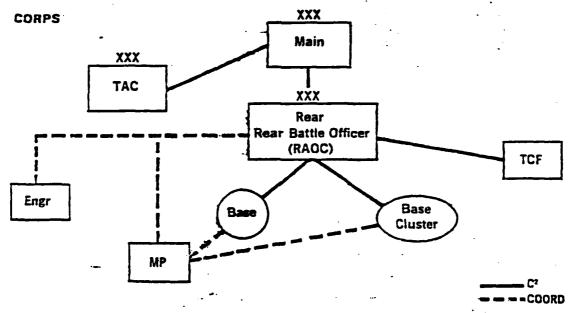
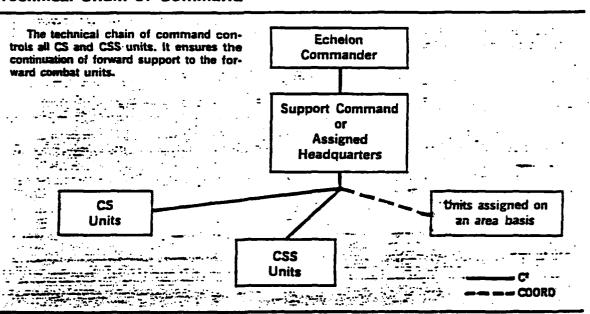
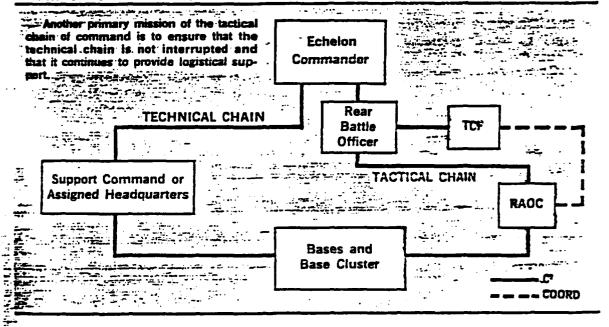


Figure 11 - 50-

# Technical Chain of Command



# The Combined Relationship of the Tactical and Technical Chain of Commands.



#### **Endnotes**

- 1. FM100-5, Operations (Washington, D.C.: May 1986), p. 2-3.
- 2. CPT John M. House, Rear Area Substudy of the AirLand Battle Study (Ft. Leavenworth, KS: 1985), p. 12.
- 3. FM90-14, Rear Battle (Washington, D.C.: June 1985), p. i.
- 4. <u>Ibid.</u>, p. 2-3 to 2-4.
- 5. FM100-15, <u>Corps Operations</u> [Preliminary Draft] (Ft. Leavenworth, KS: August 1987), p. 3-4.
- 6. <u>Ibid</u>. The rear operations categories cited in the manual are the assembly, protection and movement of reserves, establishment and maintenance of secure LOCs, protection of sustainment resources and operations and protection of command and control facilities.
- 7. Carl von Clausewitz, On War (Princeton, NJ: 1984) p. 357.
- 8. MAJ James L. Saunders, <u>Rear Operations</u>: <u>Protecting the Points of Decision</u> (SAMS Monograph, Ft. Leavenworth, KS: 1987), p. 8.
- 9. Ibid., p. 10.
- 10. <u>Ibid.</u>, p. 11.
- 11. Ibid., p. 12.

COCCESS COCCES

- 12. V.K. Triandafillov, <u>Nature of the Operations of Modern Armies</u> (Moscow, 1929)[ SAMS reprint, 1987], p. 131-137.
- 13. Mikhail Tukhachevskiy, <u>New Problems in Warfare: Soviet Operational Concept</u>. (USA War College reprint, 1983), p. 6-8.
- 14. Saunders, p. 23-28.
- 15. FM90-14, p. 1-6 to 1-7.
- 16. Saunders, p. 25-26, also see FM 100-2-1, <u>The Soviet Army: Operations and Tactics.</u>, p. 4-1.
- 17. FM90-14, p. 1-2.
- 18. Saunders, p. 25.
- 19. FM100-2-3, <u>The Soviet Army: Troops, Organization and Equipment.</u> (Washington, D.C.: 1984), p. 4-123.

- 20. Department of Defense, <u>Soviet Military Power 1987</u>. (Washington, D.C.: 1987), p. 65. With an estimated 19,000 tanks in theater, (75% of which are T64/72/80 models) ample assets are on hand to support OMGs from reinforced division size for an army level formation to an entire army for the Front. Additionally, forward detachments of battalion to regimental size can be expected to be seen whether or not OMGs are identified. Finally, TSMA commanders have another option in the recently identified "Unified Army Corps". These units are approximately twice the size of a division and appear to be well suited to deep attack missions.
- 21. FN100-2-1, p.4-3.
- 22. Christopher W. Donnelly, "The Soviet Operational Maneuver Group: A New Challenge for WATO." <u>Military Review</u>, Vol. 63 (March 1983), p. 50-51.
- 23. FM100-2-1, p. 4-3, 4-6.
- 24. Donnelly, p. 51-52.
- 25. MAJ Henry S. Shields, "Why the OMG?" Military Review. Vol. 65 (November 1985), p. 8.
- 26. Saunders, p. 29.
- 27. Ibid., p. 29-30.
- 28. Ibid.
- 29. Ibid.
- 30. Richard E. Simpkin, Red Armour: An Examination of the Soviet Mobile Force Concept (London, 1984), p. 174.
- 31. MAJ Albert A. Allenback, <u>Tactical Airpower and the Rear Battle:</u>
  <u>Defeating the OMG</u>. (CGSC MNAS Thesis, Ft. Leavenworth, KS: 1985), p. 22-23.
- 32. FM100-5, p. 20.
- 33. FM90-14, p. i.
- 34. House, p. 5.
- 35. Ibid.
- 36. <u>Ibid</u>.
- 37. Ibid.
- 38. FM100-15 (1987), p. 6-32 to 6-33.

- 45. FM17-95, Cavalry Operations (Washington, D.C.: February 1986), p. 7-31
- 47. MAJ Edward B. Bryson, Corps Rear Area Security: Analysis of Threat, Doctrine and Force Options. ( CGSC MMAS Thesis, Ft. Leavenworth, KS: 1976),
- 49. ST101-1, Organizational and Tactical Reference Data for the Army in the
- 50. BG(RET) Vincent J. Esposito, West Point Atlas of American Wars, Volume
- 51. Brigadier Anthony Farrar-Hockley, Airborne Carpet: Operation Market

- 39. Ibid.
  40. Ibid., p. 3-4.
  42. Ibid., p. 6-7 to 6-20.
  43. Ibid., p. 3-7 to 3-9.
  44. Ibid., p. 2-8.
  45. FK17-95, Cavalry Operations (Washington, D.C.: Febrito 7-35.
  46. Ibid., p. 4-4.
  47. MAJ Edward B. Bryson, Corps Rear Area Security: A Doctrine and Force Options. (CGSC MMAS Thesis, Ft. Lep. 136-137.
  48. FK17-95, p. 127-129.
  49. ST101-1, Organizational and Tactical Reference Data Field. (Ft. Leavenworth, KS: 1987), p. 7-13 to 7-14.
  50. BG(RET) Vincent J. Esposito, West Point Atlas of An II. 1920-1953. (New York, 1972), p. 58.
  51. Brigadier Anthony Farrar-Hockley, Airborna Carpet: Garden. (New York, 1969), p. 6-7.
  52. Esposito, p. 58.
  53. Farrar-Hockley, p. 60-61.
  54. Cornelius Ryan, A Bridge Ton Far. (New York, 1974) battle the Fanzer Korps received 25 Tigers (Nk VI) and as reinforcements which it spread out among the two d. 55. Esposito, p. 58.
  56. Ryan, p. 218-219.
  57. Ibid., p. 229-231.
  58. Ibid.
  59. Ibid., p. 323-325. 54. Cornelius Ryan, A Bridge Too Far. (New York, 1974), p. 150. During the battle the Panzer Korps received 25 Tigers (Mk VI) and 20 Panthers (Mk V) as reinforcements which it spread out among the two divisions.

- 60. Farrar-Hockley, p. 80.
- 61. Esposito, p. 58.
- 62. Ibid.
- 63. Ibid.
- 64. Ibid.
- 65. Ryan, p. 572. Casualties were heavy on both sides. The British lost 1,200 KIA and 6,642 WIA/MIA/captured. The Germans lost 1,100 KIA and 3,300 WIA/MIA. Dutch casualties are not known but were probably heavy.
- 66. Farrar-Hockley, p. 7.
- 67. Ryan, p. 591.
- 68. ST101-1, p. 7-13.
- 69. MG F.W. von Mellenthin, <u>Panzer Battles: A Study of the Employment of Armor in the Second World War</u>. (New York, 1956), p. 207-211. It is interesting to note that the Luftwaffe unit was an attempt to augment the army by diverting surplus air force support troops to ground combat duty. While the men and equipment were first rate, the training and leadership were wholly inadequate for combat duty.
- 70. von Mellenthin, p. 211-213.
- 71. <u>Ibid</u>. At this time, developing doctrine in the German Army relied upon mobile armored formations operating in the rear of defended lines to act as a reaction force against penetrations. One of the techniques used was to co-locate headquarters so as to coordinate the movement of the mobile force with the stationary one and to "borrow" artillery of the static unit whenever possible to support the mobile force.
- 72. <u>Ibid.</u>, p. 213. According to the Soviet Army Studies Office, this period saw the Russians reorganizing their armored forces. An armored corps numbered between 168-200 tanks at full strength.
- 73. Ibid., p. 214.
- 74. Ibid.

CONTRACTOR ACCORDANGE AND ACCORDANG CONTRACTOR CONTRACTOR ACCORDANGE AND ACCORDANGE ACCO

- 75. <u>Ibid.</u>, p. 217-218. The Germans actually conducted two attacks netting 42 and 21 Soviet tanks respectively.
- 76. MAJ Gregory Fontenot, <u>The Lucky Seventh in the Bulge: A Case Study for the AirLand Battle</u>. (CGSC MMAS Thesis, Ft. Leavenworth, KS: 1985), p. 13.

- 77. Ibid.
- 78. Ibid., p. 15.
- 79. <u>Ibid</u>. The Germans were able to mass only 240 tanks despite the impressive panzer army and division designations.

- 80. Ibid., p. 14.
- 81. Ibid., p. 5-6.
- 82. Ibid., p. 40-45. The 7AD entered the battle with nearly all its authorized 186 M4 tanks, almost three full armored infantry battalions (1000 men each), a mechanized cavalry squadron and three 105mm self-propelled howitzer battalions.
- 83. <u>Ibid.</u>, p. 40-45.
- 84. Ibid.
- 85. Charles B. MacDonald, <u>A Time for Trumpets: The Untold Story of the Battle of the Bulge</u>. (New York, 1985), p. 466.
- 86. Ibid., p. 474.
- 87. Fontenot, p. 47~51.
- 88. Ibid., p. 62-63.
- 89. MacDonald, p. 474.
- 90. Ibid.
- 91. Ibid., p. 478-479.
- 93. Fontenot, p. 28.
- 94. Saunders, p. 2-3.
- 95. FM90-14, p. 3-20 to 3-21.
- 96. LTC P. Sowa, "Rear Operations: Can We Execute the Doctrine?", <u>USA War College Essay.</u> (Carlisle Barracks, PA: 1987), p. 9.
- 97. LTC Raymond E. Gentilini, "The Rear Battle: A Maneuver Doctrine Dilemma.", <u>USA War College Essay</u>. (Carlisle Barracks, PA: 1986), p. 5.
- 98. House, p. 14-15.
- 99. Ibid., p. 12-14.

The following notes are acknowledgements for the figures used in the text. Figure 1. (Corps area of operations) FM100-15 (1987), p. 6-9.

- Figure 2. (Front wiring diagram) FM100-2-3, p. 4-123.
- Figure 3. (ACR wiring diagram) ST101-1, p. 7-13.
- Figure 4. (Market Garden- The Front) Ryan, p. 34-35.
- Figure 5. (Market Garden- The Attack) Ryan, p. 220-221.
- Figure 6. (Market Garden- The End) Ryan, p.574-575.
- Figure 7. (State Farm 79) von Mellenthin, p. 210.
- Figure 8. (Chir River Battles) von Mellenthin, p. 212.
- Figure 9. (Battle of the Bulge) Richard Natkiel, Atlas of World War II. (Greenwich, CT.: 1985), p. 182.
  - Figure 10. (Defense of St. Vith) MacDonald, p. 471.
  - Figure 11. (Tactical Chain of Command) FM90-14, p. 3-2.
  - Figure 12. (Combined Chains of Command) FM90-14, p. 3-3.

## Bibliography

## Books

- Clausewitz, Carl von, On War. Princeton, New Jersey: Princeton University Press, 1984.
- Esposito, Vincent J., <u>West Point Atlas of American Wars</u>, <u>Volume II. 1900-1953</u>. New York, NY: Praeger Publishers, 1972.
- Farrar-Hockley, Brigadier Anthony., <u>Airborne Carpet: Operation Market-Garden.</u> New York, NY: Ballantine Books Inc., 1969.
- NacDonald, Charles B., A Time for Trumpets: The Untold Story of the Battle of the Bulge. New York, NY: William Morrow and Co., 1985.
- Macksey, Kenneth J., <u>Panzer Division</u>. The <u>Mailed Fist</u>. New York, NY: Ballantine Books Inc., 1968.
- Mellenthin, Major General F.W. von , <u>Panzer Battles: A Study of the Employment of Armor in the Second World War.</u> New York, NY: Ballantine Books Inc., 1956.
- Ryan, Cornelius, <u>A Bridge Too Far.</u> New York, NY: Simon and Schuster Inc., 1974.

ERE POSSESSE POSSESSE POSSESSE SOCIEDAD DESCRIPTOR AND SOCIEDAD SO

- Simpkin, Richard E., <u>Deep Battle: The Brainchild of Marshal Tukhachevski.</u>
  London, UK: Brassey Publishers, 1987.
- Simpkin, Richard E., Red Armour: An Examination of the Soviet Mobile Force Concept. London, UK: Brassey Publishers, 1984.

PRIZZZZZE COCCCOU KCSSSSSI INSSSSSS PRIZZZCO

- Triandafillov, V.K., <u>Nature of the Operations of Modern Armies.</u> Moscow-Leningrad, 1929. SAMS reprint: Russ-Eng Translations, Woodgridge, VA. AY 87-88.
- Tukhachevskiy, Mikhail, <u>New Problems in Warfare: Soviet Operational Concepts.</u> Carlisle Barracks, PA: USAWC Reprint, 1983.

## Manuals and Official Publications

- FM 17-95, Cavalry. Washington, D.C.: HQ, Department of the Army, 1986.
- FM 90-14, Rear Battle. Washington, D.C.: HQ, Department of the Army 1985.
- FM 100-2-1, <u>The Soviet Army: Operations and Tactics.</u> Washington, D.C.: HQ, Department of the Army, 1984.
- FM 100-2-2, The Soviet Army: Specialized Warfare and Rear Area Support. Washington, D.C.: HQ, Department of the Army, 1984.

- FM 100-2-3, The Soviet Army: Troops, Organization and Equipment. Washington, D.C.: HQ, Department of the Army, 1984.
- FM 100-5, Operations. Washington, D.C.: HQ, Department of the Army, 1986.
- FN 100-15, <u>Corps Operations</u> (Final Draft). Washington, D.C.: HQ, Department of the Army, 1985.

PRODUCTION OF THE PROPERTY OF THE PROPERTY SECONDS SECONDS OF THE PROPERTY OF

- FM 100-15, <u>Corps Operations</u> (Preliminary Draft). Washington, D.C.: HQ, Department of the Army, 1987.
- Pamphlet 20-233, <u>German Defense Tactics Against Russian Breakthroughs.</u>
  Washington, D.C.: HQ, Department of the Army, 1951.
- ST 101-1, Organizational and Tactical Reference Data for the Army in the Field. Ft. Leavenworth, KS: USACGSC, 1987.
- USACGSC Reprint, <u>Division Operations During German Campaign in Russia.</u>
  Ft. Leavenworth, KS: USACGSC, 1987.

## Articles

- Donnelly, C.N., "The Soviet OMG: A New Challenge for NATO." <u>Military</u> <u>Review</u>. March 1983, pp. 42-60.
- Landry, COL John R. and Fonda, LTC Garrett R., "Countering the Soviet Forward Detachments." <u>Military Review</u>. June 1987, pp. 14-25.
- Shields, MAJ Henry S., "Why the OMG." <u>Military Review.</u> November 1985, pp. 5-13.

## Documents

- Allenback, MAJ Albert A., "Tactical Airpower and the Rear Battle: Defeating the OMG." MMAS Thesis, Ft. Leavenworth, KS, 1985.
- Bryson, MAJ Edward B., "Corps Rear Area Security: Analysis of Threat, Doctrine and Force Options." MMAS Thesis, Ft. Leavenworth, KS, 1976.
- Department of Defense, "Soviet Military Power, 1987." Washington D.C., 1987.
- Fiebig, LTC Heintz, "Integration of German Territorial Forces in NATO Planning." USAWC Essay, Carlisle Barracks, PA., 1986.
- Fontenot, MAJ Gegory, "The Lucky Seventh in the Bulge: A Case Study for the AirLand Battle." MMAS Thesis, Ft. Leavenworth, KS, 1985.
- Gentilini, LTC Raymond E., "The Rear Battle: A Maneuver Doctrine Dilemma." USAWC Essay, Carlisle Barracks, PA., 1986.

<del>ŶĸĬĸĬĸŶĸŶĸĬĸŶĸĬĊĬĸŎĸŎĸŶĸĬĸĬĸĬĸĬĸĬ</del>ĸĬĦĬĦĔĸĬĸĠĸĬĸĬĸĬĸĬĸĬĸŎĸĊĸĬĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ

- House, CPT John M., "Rear Area Substudy of the AirLand Battle Study." Technical Report, 1985. CARL REF # AD C037816 (Secret).
- Saunders, MAJ James L. "Rear Operations: Protecting the Points of Decision." SAMS Monograph, 1987.
- Soviet Army Studies Office, "Soviet Army Studies." SAMS Reprint, Ft. Leavenworth, KS., 1987.
- Sowa, LTC P., "Rear Operations: Can We Execute the Doctrine?" USAWC Essay, Carlisle Barracks, PA., 1987.
- Wilson, MAJ Ronald W., "Corps Combat Aviation Brigade in the Rear Battle: A Future Scenario." MMAS Thesis, Ft. Leavenworth, KS, 1985.

END 1) A TE FILMED 6-1988 DTIC